

## NOAA Physical Oceanographic Real-Time Systems (PORTS®)

PORTS® are coastal ocean observing systems developed and managed by the Center for Operational Oceanographic Products and Services (CO-OPS), part of NOAA's National Ocean Service. Tailored to the specific needs of local communities, PORTS® measures, integrates, and disseminates observations of water levels, currents, salinity, wind, and bridge clearance, all of which help mariners successfully guide ships into and out of the nation's busiest ports. The information made available by PORTS® results in economic benefits essential for the movement of goods, services, and people throughout the 25,000 miles of waterways, ports, and other navigable waters, as well as over 3,700 marine terminals, that consist of the US marine transportation system.



## SABINE-NECHES PORTS®

Located in Southeast Texas, the Sabine-Neches Waterway has a broad reaching economic impact, both locally and nationally. Nearly 85,000 jobs are tied to the Waterway and its operations with \$4.7 billion in earnings annually. Approximately 75,000 ship movements and more than 118 million tons of cargo move through the Waterway yearly. The Sabine-Neches Waterway is the #1 U.S. crude tanker arrival port, holds 45% of the Nation's liquefied natural gas (LNG) import capacity, and supplies 20% of U.S. gasoline east of the Rockies. The Waterway is also critical to our national and global security, as it is the second largest U.S. military port in the world and ranks #1 in U.S. commercial military out-load. Should the Sabine-Neches waterway halt operations due to a natural disaster or shipping incident, it would cost the nation as much as \$50+ million/day and would have a national impact, such as a gasoline price increase of 20 cents/gallon in one week.

The Sabine-Neches PORTS® was established primarily to support the safe transit of liquefied natural gas (LNG) to new LNG facilities. With PORTS® the Sabine Neches Waterway will be better equipped to safely and efficiently move commodities through its waterways and to facilitate the economic growth of the State of Texas through international trade and the creation of employment.

"The Sabine-Neches PORTS® array has given our local maritime industry a great increase in situational awareness. Knowing the currents and water levels ahead of arrival greatly increases efficiency and safety for our mariners."

*Clayton Henderson, Assistant General Manager for the Sabine Neches Navigation District*

The Sabine-Neches PORTS® supports safe maritime commerce by providing real-time data on tides, water levels,



and weather. The Sabine-Neches system consists of strategically located environmental sensors which gather real-time data from seven water current measurement stations and four water level measurement systems, three of which include meteorological packages that measure wind speed and direction, air and water temperatures, and barometric pressure. PORTS® observations are collected from each sensor at 6-minute intervals and are available via the internet, PDA, and by toll-free phone.

PORTS® has proven to deliver benefits that include:

- Safer shipping and boating from fewer groundings and collisions, more accurate marine weather forecasts, and improved response to distress calls;
- More efficient port operations from optimized cargo loading, and increased throughput with fewer delays;
- Improved environmental planning and protection from more effective response to hazardous material spills, and the availability of real-time environmental information for coastal managers; and,
- Enhanced recreational use by boaters and fisherman from a strategically placed suite of meteorological sensors, current meters, and other information which gathers and disseminates valuable real-time environmental information.

#### For Further Information Contact:

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